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IE 449-102: Industrial Robotics

Evens Aristilde

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IE 449 Industrial Robotics Spring 2021 Syllabus

Mechanical and Industrial Engineering Department

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Office hours: On Mondays 5pm or by appointment

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Course Description

This is an introduction to Robotics. The objective of this course is to teach students the basics of robot systems and to give hands on experience with robots that are used in current production environments. We will be covering the history of robotics, how to work safely with robots, common electrical terms, main components of robots, classification of robots (by power source, work envelope and reach or drive system), end-of-arm tooling, types of sensors and switches, robot operations, programming and file management, troubleshooting and repairing.

Moodle

We are going to be using Moodle throughout the semester to distribute all course material. Submissions are also going to be collected through Moodle. You can access your Moodle account from your computer and modem at home, from the labs at NJIT (and Rutgers), or from any computer with access to the Internet network with your UCID and password.

Course Material

Textbook: Basic Robotics by Keith Dinwiddie, 1st Edition, Cengage

ISBN-10: 1-133-95019-1

ISBN-13: 978-1-133-95019-6

Provided material on Moodle:

PowerPoint Slides

Videos

Reading Material

<i>Grading Letter</i>	<i>Grade</i>	<i>GPA Point</i>
A	89.9 up to 100	4.0
B+	86.9 up to 89.9	3.5
B	79.9 up to 86.9	3.0
C+	76.9 up to 79.9	2.5
C	69.9 up to 76.9	2.0
D	59.9 up to 69.9	1.0
F	0 up to 59.9	0